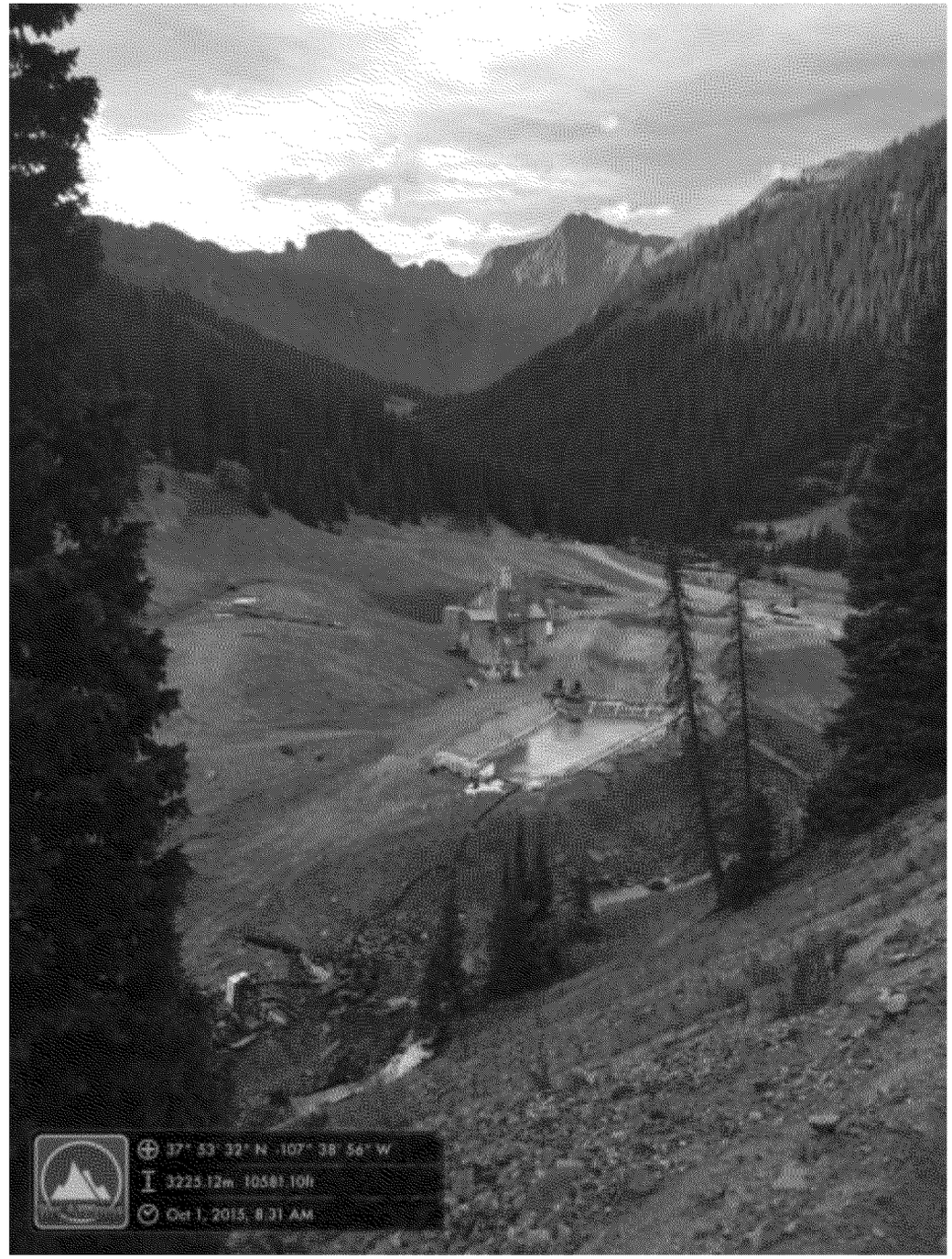
Gold King Mine Site Operations

- Stabilizing mine access to establish control of water flow over the winter
- Piping water discharge approx. 4600 feet from mine to treatment ponds at Gladstone
- Further entry and stabilization will occur next season

Gold King Mine Adit

Shot Crete stabilizing opening

Treatment Pond at Gladstone



Water Treatment

- Temporary treatment plant being installed to treat GKM discharge over winter and during mine site operations; treating ~550 gpm from GKM
- Water treatment performance:

  Neutral pH effluent <6.0, >9.0

  Dissolved solids will be reduced by removal of metals and formation of metal hydroxide sludge.

  Total solids will be reduced by coagulation, flocculation, and settling through the clarifier.

  Color is currently caused primarily iron oxidation, and staining is caused both by iron and manganese in the mine water forming precipitates on rocks and in sediments. The treatment process will remove both iron and manganese by more than 90%, reducing the potential for color.

  For metals of concern, the treatment process typically removes metals between 95% and 99%.